Fig. 1

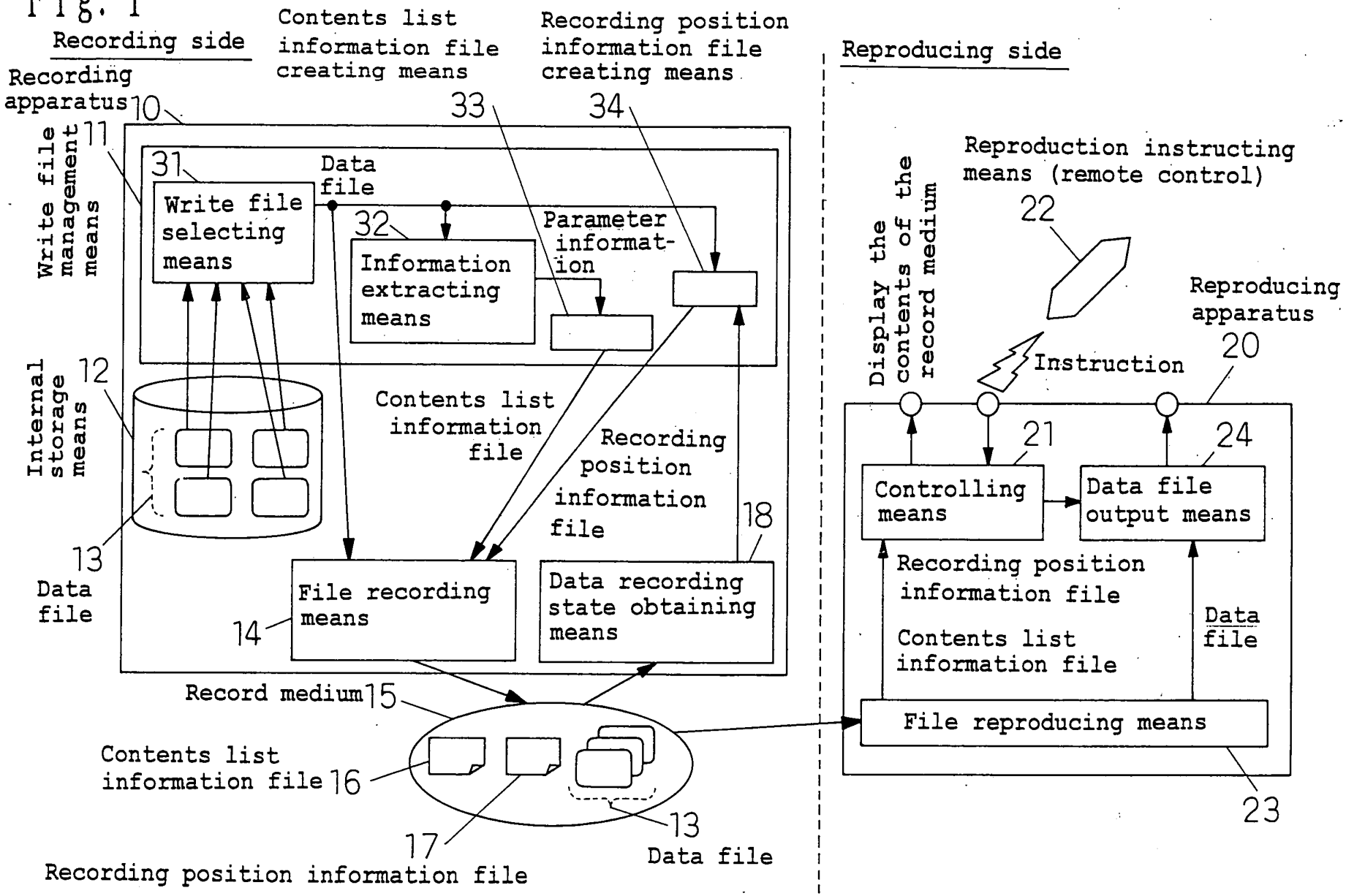
Recording side
Contents list information file creating means
Recording position information file creating means
Reproducing side
Recording apparatus
10
33
34
11
Write file management means
31
Write file selecting means
Data file
32
Information extracting means
Parameter information
Reproduction instructing means (remote control)
22
Display the contents of the record medium
Reproducing apparatus
20
Instruction
12
Internal storage means
Contents list information file
Recording position information file
21
24
Controlling means
Data file output means
18
13
Data file
File recording means
14
Data recording state obtaining means
Recording position information file
Contents list information file
Data file
Record medium
15
File reproducing means
Contents list information file
16
17
13
Data file
Recording position information file
23

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Fig. 2

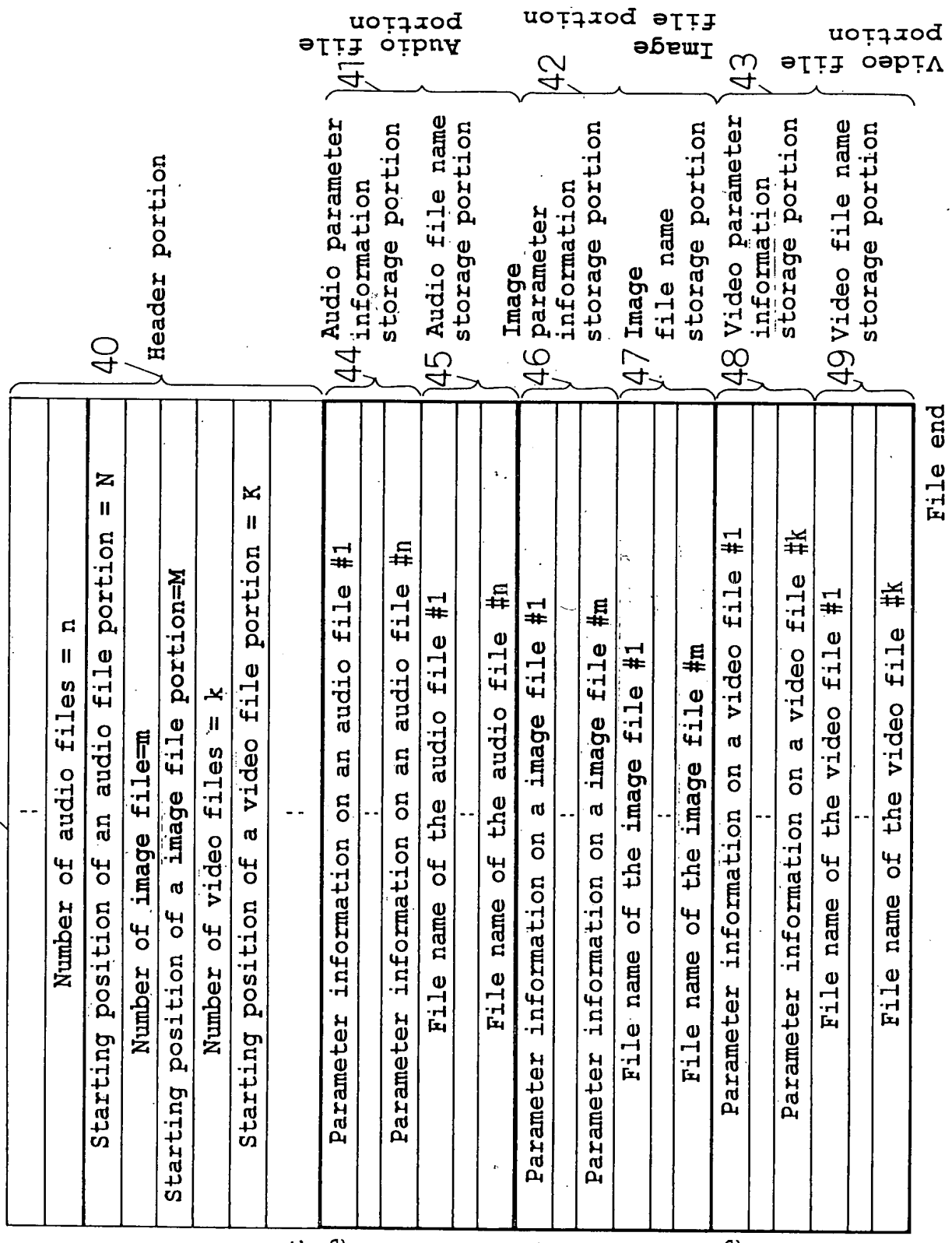
File beginning
16 Contents list information file
Number of audio files = n
Starting position of an audio file portion = N
Number of image file=m
Starting position of a image file portion=M
Number of video files = k
Starting position of a video file portion = K
40 Header portion
Parameter information on an audio file #1
Parameter information on an audio file #n
File name of the audio file #1
File name of the audio file #n
Parameter information on a image file #1
Parameter information on a image file #m
File name of the image file #1
File name of the image file #m
Parameter information on a video file #1
Parameter information on a video file #k
File name of the video file #1
File name of the video file #k
File end
Offset
N byte
M byte
K byte
44 Audio parameter information storage portion
45 Audio file name storage portion
46 Image parameter information storage portion
47 Image file name storage portion
48 Video parameter information storage portion
49 Video file name storage portion
41 Audio file portion
42 Image file portion
43 Video file portion

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Fig. 3

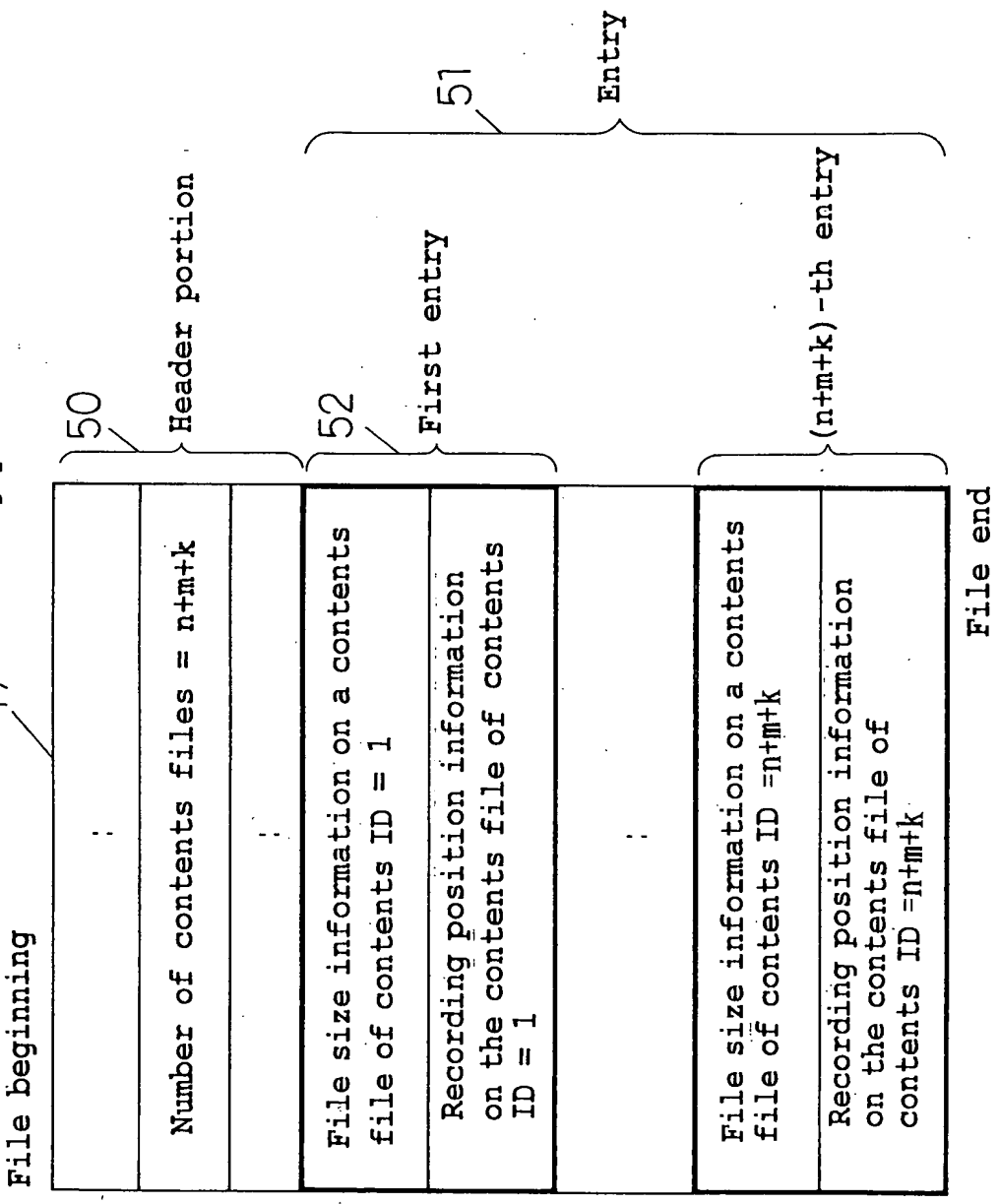

17 Recording position information file
File beginning
50
Header portion
Number of contents files = n+m+k
52
First entry
File size information on a contents file of contents ID = 1
Recording position information on the contents file of contents ID = 1
51
Entry portion
(n+m+k)-th entry
File size information on a contents file of contents ID =n+m+k
Recording position information on the contents file of contents ID =n+m+k
File end

Fig. 4

Contents ID	File size	Recording position
1	123456	1000h
3	3456789	2000h
8	567890	3000h

Fig. 5

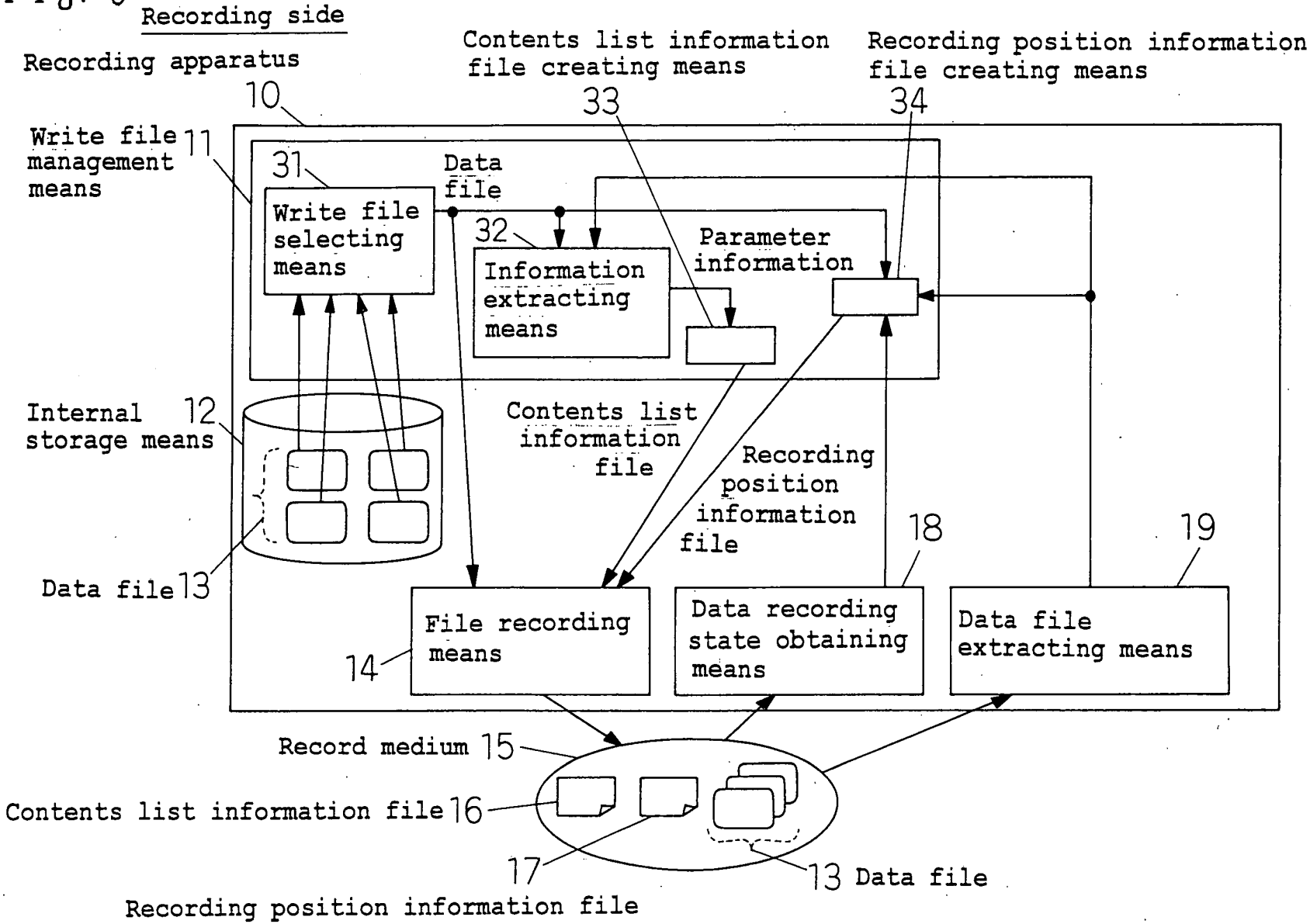

Recording side
Recording apparatus
10
Contents list information file creating means
33
Recording position information file creating means
34
Write file management means
11
31
Write file selecting means
Data file
32
Information extracting means
Parameter information
Internal storage means
12
Contents list information file
Recording position information file
Data file
13
18
19
File recording means
14
Data recording state obtaining means
Data file extracting means
Record medium
15
Contents list information file
16
17
13
Data file
Recording position information file

Fig. 6 (a)

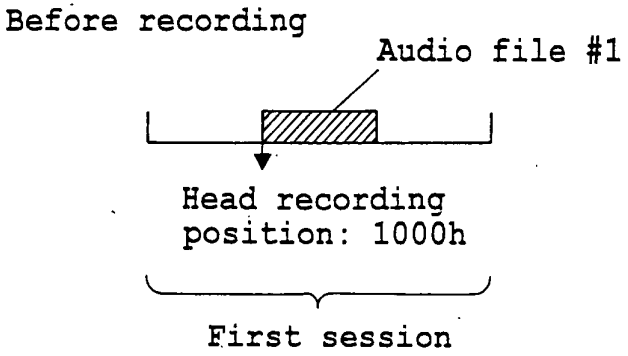


Fig. 6 (b)

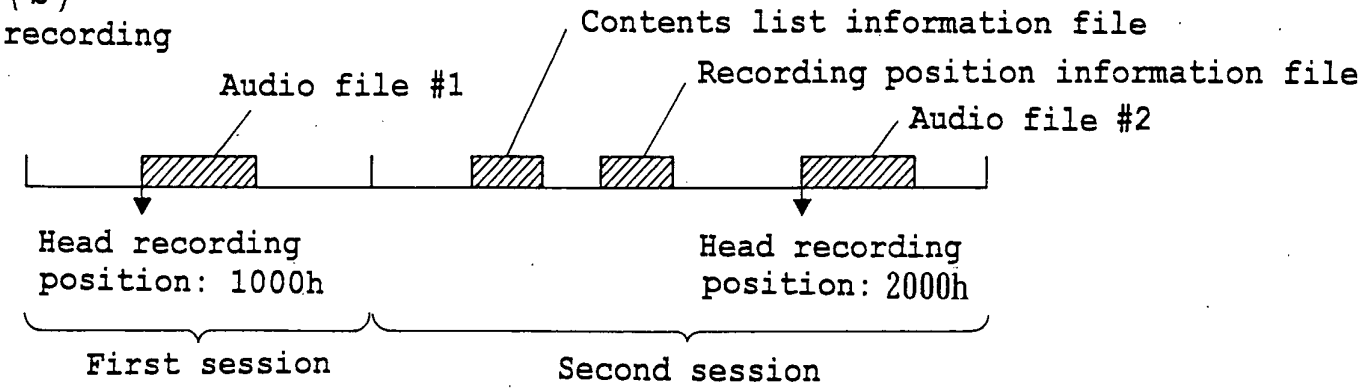


Fig. 6 (c)

Audio file portion of the contents list information file

Parameter information on the audio file #1
Parameter information on the audio file #2
File name of the audio file #1
File name of the audio file #2

Fig. 6 (d)

Entry portion of the recording position information file

File size of the audio file #1
Recording position of the audio file #1 =1000h
File size of the audio file #2
Recording position of the audio file #2 =2000h

Fig. 7

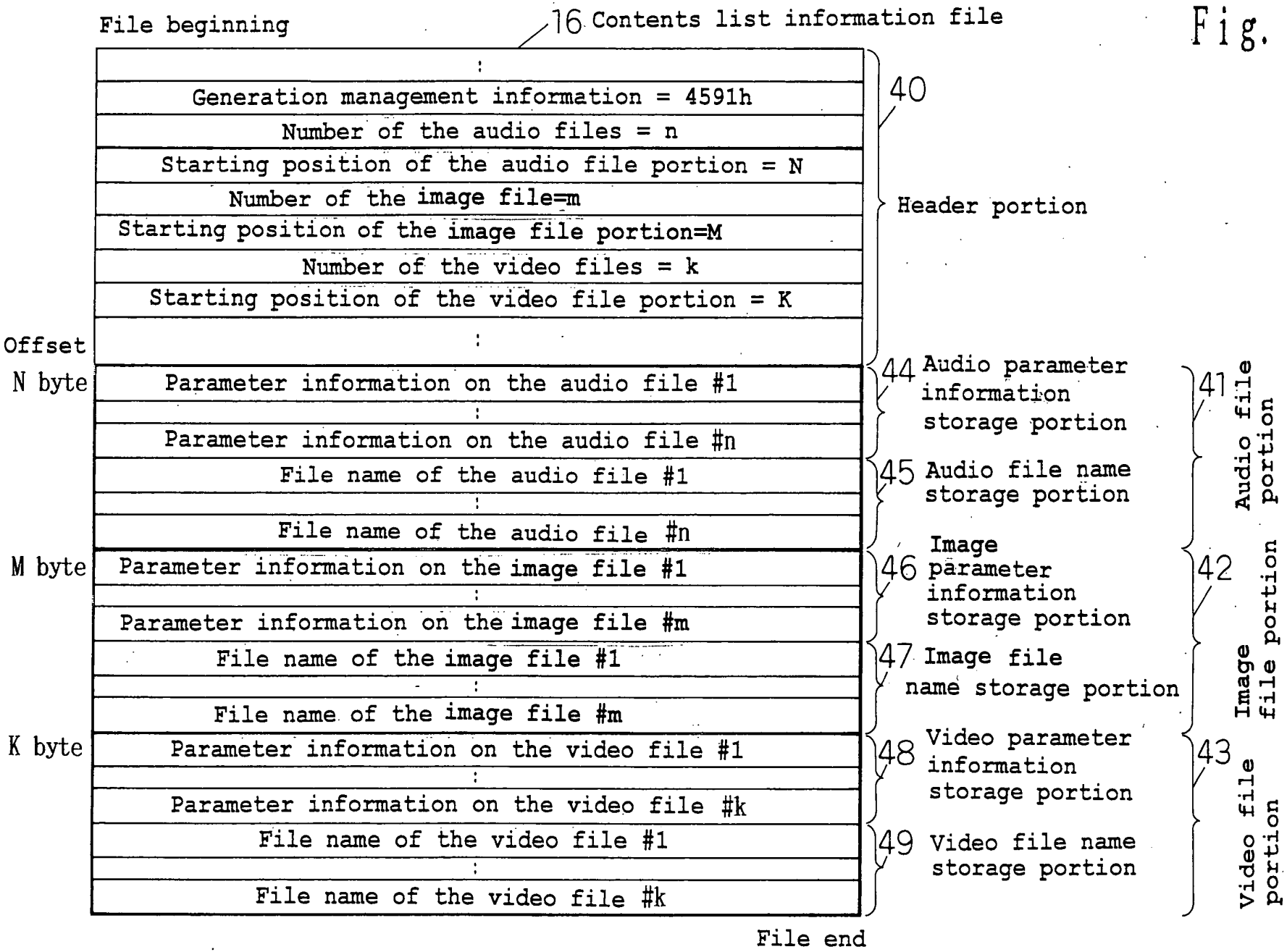

File beginning
16 Contents list information file
:
Generation management information = 4591h
Number of the audio files = n
Starting position of the audio file portion = N
Number of the image file=m
Starting position of the image file portion=M
Number of the video files = k
Starting position of the video file portion = K
:
Offset
N byte
Parameter information on the audio file #1
:
Parameter information on the audio file #n
File name of the audio file #1
:
File name of the audio file #n
M byte
Parameter information on the image file #1
:
Parameter information on the image file #m
File name of the image file #1
:
File name of the image file #m
K byte
Parameter information on the video file #1
:
Parameter information on the video file #k
File name of the video file #1
:
File name of the video file #k
File end
40
Header portion
44 Audio parameter information storage portion
45 Audio file name storage portion
41 Audio file portion
46 Image parameter information storage portion
47 Image file name storage portion
42 Image file portion
48 Video parameter information storage portion
49 Video file name storage portion
43 Video file portion

Fig. 8

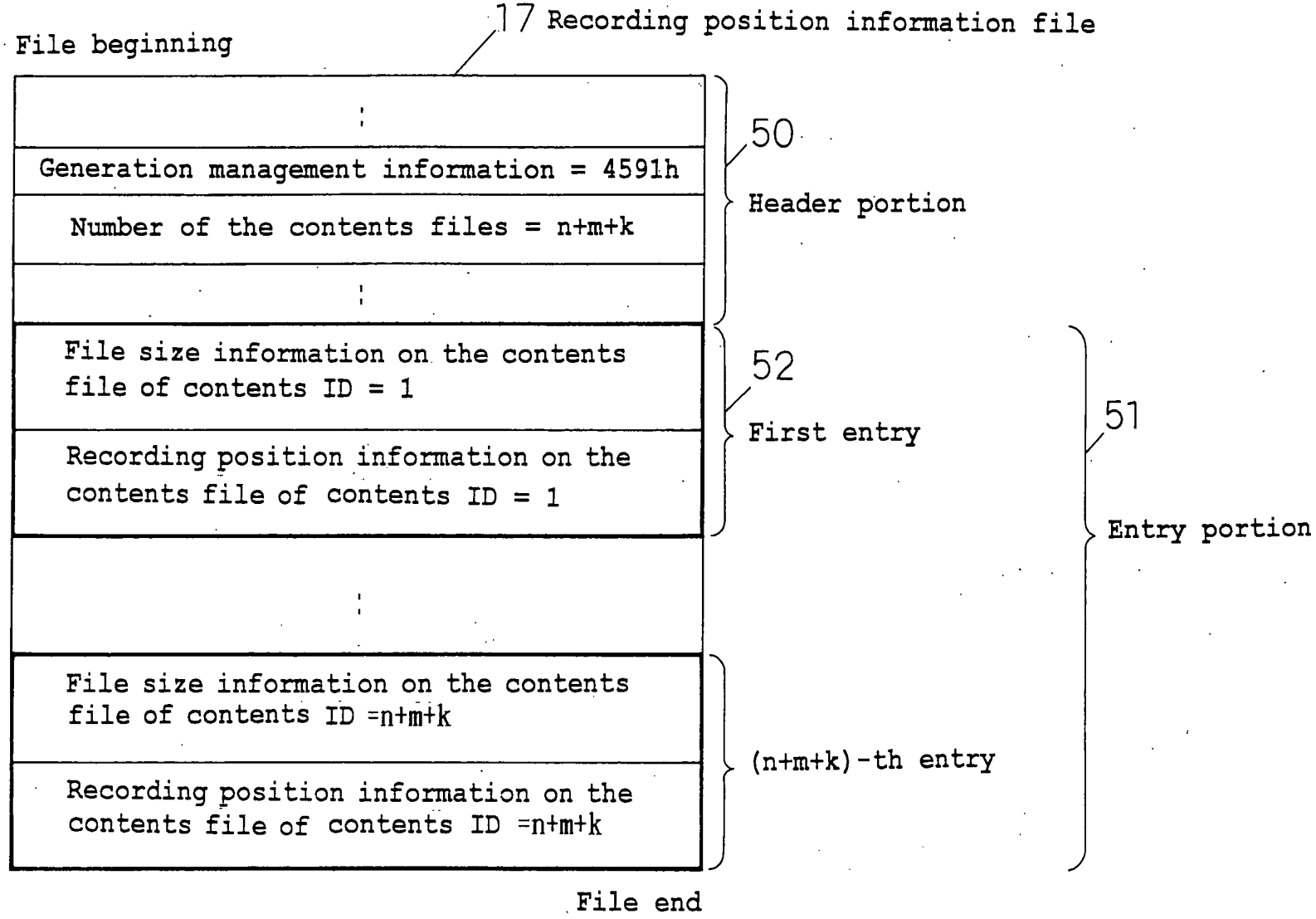

17 Recording position information file
File beginning
Generation management information = 4591h
Number of the contents files = n+m+k
50
Header portion
File size information on the contents file of contents ID = 1
Recording position information on the contents file of contents ID = 1
52
First entry
51
Entry portion
File size information on the contents file of contents ID =n+m+k
Recording position information on the contents file of contents ID =n+m+k
(n+m+k)-th entry
File end

Fig. 9

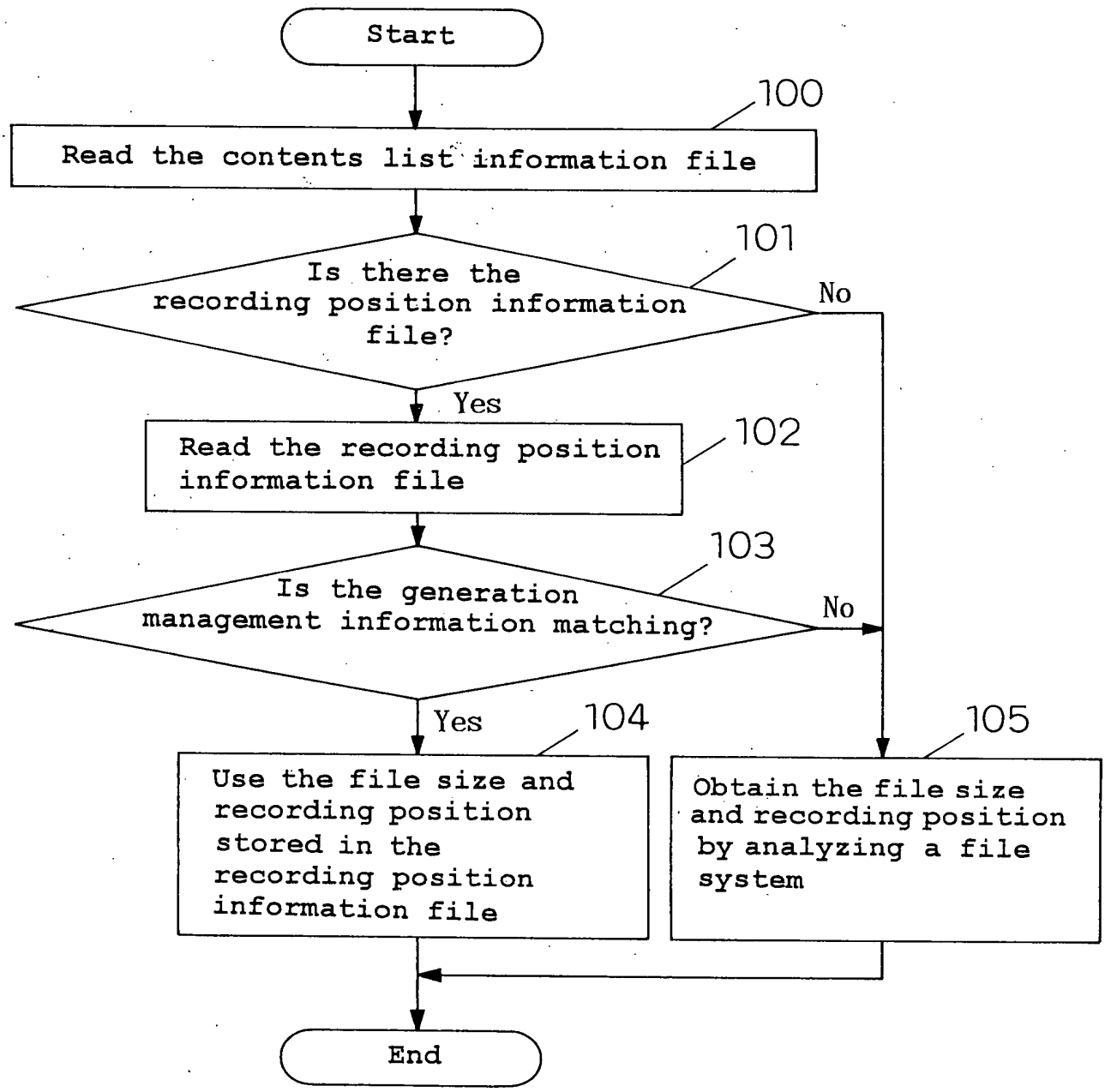
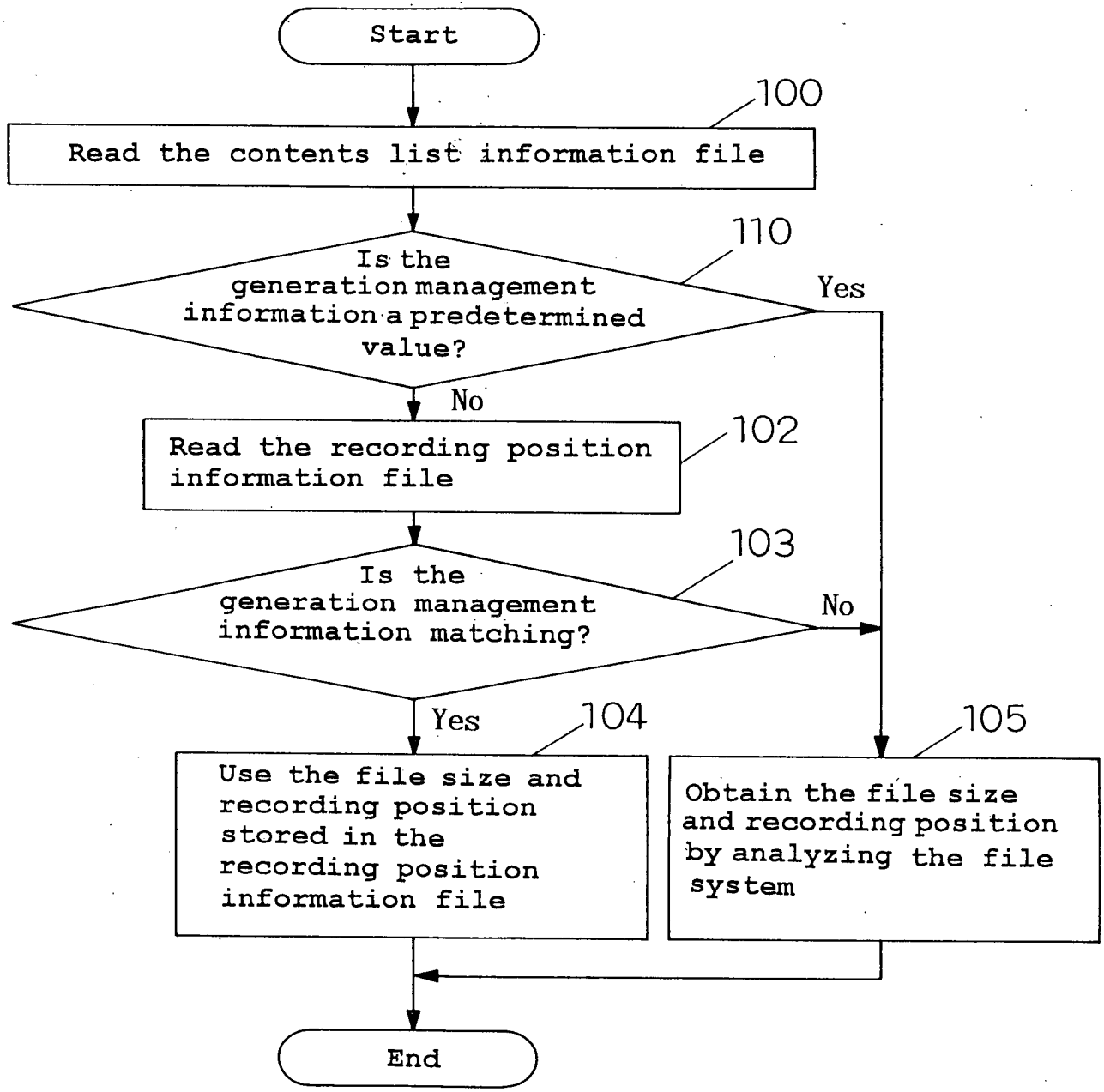

Start
100
Read the contents list information file
101
Is there the recording position information file?
No
Yes
102
Read the recording position information file
103
Is the generation management information matching?
No
Yes
104
Use the file size and recording position stored in the recording position information file
105
Obtain the file size and recording position by analyzing a file system
End

Fig. 10


Start
100
Read the contents list information file
110
Is the generation management information a predetermined value?
Yes
No
102
Read the recording position information file
103
Is the generation management information matching?
No
Yes
104
Use the file size and recording position stored in the recording position information file
105
Obtain the file size and recording position by analyzing the file system
End